

ANACONDA Copper Company

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1186094 - R8 SDMS

September 10, 1980



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SEP 11 1980

WATER QUALITY
CONTROL DIVISION

Fred Matter, P. E., Chief
Monitoring & Enforcement Section
Water Quality Control Division
Colorado Department of Health
4210 East 11th Avenue
Denver, Colorado 80220

Re: Notice of Violation and Cease
and Desist Order - Rico Project

Dear Mr. Matter:

This letter is intended to satisfy the written response requirement of the Cease and Desist Order (paragraph 3.) dated August 27, 1980, issued to Rico Exploration and Production Company (sic), a division of Crystal Exploration and Production Company, with respect to Permit No. C0-0029793. (That Permit was transferred to Anaconda Copper Company by the Division on September 4, 1980.)

Anaconda Copper intends to fully comply with the Order and to implement the compliance schedule (paragraph 4.) as follows:

4a. Flow Monitoring

We have found a supplier of parshall flumes (description attached) which we feel should be applicable for monitoring the flow from the settling ponds. Dave Bufalo, of Anaconda Copper, and Fred Hinman, Southwest District Engineer, Colorado Department of Health, were scheduled to visit the site on Tuesday, September 9, 1980. The flume installation was to be evaluated at that time and, if it is determined to be technically feasible, the flume will be ordered promptly. Controlling the impact of the flume installation activity on the river will also be discussed during the site visit, and Anaconda Copper will take all reasonable steps necessary to minimize the impact of that installation upon the Dolores River. Due to anticipated delays of 2 to 3 weeks in delivery of such a flume by the supplier, we may not be able to have the installation

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complete by October 1, 1980; but feel certain that it will be complete by October 15, 1980. Please advise if this approach is not satisfactory.

4b. Single Point Discharge

We believe that this can be accomplished concurrently with the flume installation (4a), by installing the flume such that its final elevation is set so that multiple outflows from the pond will no longer exist. If necessary to accomplish this, the dike on the pond will also be built up. This work was also to be discussed and evaluated in the field by Dave Bufalo and Fred Hinman during the site visit yesterday.

4c. Compliance Program

We are working on a proposal for a study by an independent consultant which will determine the alternatives available to Anaconda Copper to bring the discharges into compliance with the Permit. A description of this work will be completed next week, and we will forward a copy to you at that time for your review and comments, and anticipate having a final proposal, with a schedule of implementation, to you prior to October 15.

4d. Environmental Impact

A program description for a study to demonstrate the impact, if any, of the ponds on the Dolores River is attached for your review. We are planning to initiate this study in time to do the benthic sampling this fall, and would appreciate receiving your comments and approval at your earliest convenience. Upon your approval, such a program will be initiated within 15 days.

With respect to paragraph 5. of the Order, Anaconda Copper will timely complete and submit all discharge monitoring reports as required by the Permit.

If any further information is needed, please advise.

Very truly yours,



John R. Whyte

JRW:mjo

Enclosure

cc: EPA, Region VIII
Mr. Fred Hinman

Rico Surface Water Assessment Description of Work

The Anaconda Copper Company is presently involved in a comprehensive exploration project in the immediate area of Rico, CO. There are many inactive and abandoned mines in the area. The purpose of this study is to inventory the quality and quantity of waters in the Dolores River and Silver Creek drainages and to assess the effects of the water quality on the benthic macroinvertebrate communities within these streams. The study should also include quantification of and an impact assessment of significant flows entering the drainages. A three-year study is planned, but this proposal is to address only the first year.

The following study design should not be considered as all inclusive. Contractor innovation is encouraged.

Study Area

The study area will include:

1. The drainage area associated with the mainstem of the Dolores River from its headwaters above Rico, CO to its confluence with the West Fork of the Dolores River near Stoner, CO.
2. The Silver Creek drainage from its headwaters above the Rico-Argentine Mine to its confluence with the Dolores River.

Water Quality & Quantity

For the purpose of this proposal, it should be assumed that fifteen (15) water quality stations will be identified. Each sample station will require flow gauging in order to provide an accurate water balance.

Water flows are to be measured by flow metering equipment, staff gauges or other appropriate devices.

Samples shall be collected in such a manner so as to provide a representative sample.

Samples shall be prepared and analyzed as per U. S. EPA "Methods for Chemical Analysis of Water & Wastes (EPA-600-4-79-020).

Samples shall be analyzed for, at least, the following parameters:

Field pH.	Bicarbonate
Field Conductivity	Hydroxide
Field Temperature	Chloride
Field Alkalinity	Fluoride
Field Dissolved Oxygen	Nitrate & Nitrite

Turbidity	Phosphate
Lab pH.	Cyanide
Total Hardness	Sulfate
Total Suspended Solids	Manganese
Total Dissolved Solids	Zinc
Calcium	Copper
Magnesium	Lead
Sodium	Arsenic
Potassium	Cadmium
Iron	Mercury

Benthic Macroinvertebrate Sampling

For the purpose of this proposal, it should be assumed that at least nine (9) benthic stations will be monitored for benthic riffle organisms. Each benthic station should correspond to a water quality station.

Each sample station shall be sampled both qualitatively and quantitatively, using appropriate sampling equipment. A minimum of a 3 sq. ft. composite sample shall be collected at each site. Benthic macroinvertebrates shall be identified to taxonomic genus and species, where possible.

Monitoring Frequency - Water Quality & Quantity

Water quality and flows are to be determined monthly for 12 consecutive months, starting within 2 weeks after the signing of the contract.

Monitoring Frequency - Benthics

Benthic sampling shall be completed in the fall of 1980.

Reporting

For the purpose of this proposal, it shall be assumed the study period to be one year from the onset of sampling, with the final report due within 14 months.

Interim Reporting - Water Quality & Quantity

Copies of water quality analyses shall be submitted on a monthly basis. Corresponding flow data shall be submitted with each analysis data sheet for each station sampled. Following six months of sampling, a report shall be submitted summarizing water quality and stream pollutant loading.

Interim Reporting - Benthic Macroinvertebrates

An interim benthic macroinvertebrate report listing specific taxonomic ranking of all organisms collected from each sample station shall be submitted to Anaconda within three months following field collection. This report shall contain both a qualitative and quantitative summarization of benthic communities present at each site.

Final Report

The draft final report shall be submitted for review by Anaconda within 13 months following initiation of field sampling. This report shall include a summarization of all water quality and quantity data correlated with an assessment of the effects of same on the benthic macroinvertebrate communities. The final report shall be submitted within one month following review and return by Anaconda of the draft final report.

FIGURE 1

POTENTIAL RICO WATER QUALITY & BENTHIC SAMPLING STATIONS



